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**United States Patent** [19]  
**Kaye et al.**

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[54] **METHOD AND APPARATUS FOR  
CORRECTING HORIZONTAL, VERTICAL  
AND FRAMING ERRORS IN MOTION  
PICTURE FILM TRANSFER**

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#### Related U.S. Application Data

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[58] Field of Search ..... 358/214-216,  
358/102, 54

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#### [57] ABSTRACT

A film correction system adjusts a relative position of film containing an area for information and a scanner of the film area. The system includes a scanner for scanning the film area at a film plane. A film drive moves the film along the film plane. A focused beam separate from the film area scanner scans a film edge in the film for determining a location of the film edge. A circuit is coupled to the focused beam scanner for changing a relative position of the film area scanner and the film area. The film edge scanner is a flying spot scanner, and the apparatus includes signal processors for processing the sprocket information. The system may be retrofit to an existing telecine apparatus. A separate coil may be used to provide deflection of a flying spot scanner used to scan the picture information on the film.

67 Claims, 19 Drawing Sheets

